

United States Court of Appeals for the Federal Circuit

04-1323, -1487

ARTHROCARE CORPORATION,

Plaintiff/Counterclaim Defendant-Appellee,

and

ETHICON, INC.,

Counterclaim Defendant-Appellee,

v.

SMITH & NEPHEW, INC.,

Defendant/Counterclaimant-Appellant.

Jared Bobrow, Weil, Gotshal & Manges LLP, of Redwood Shores, California, argued for plaintiff/counterclaim defendant-appellee. With him on the brief were Matthew D. Powers and Perry R. Clark. Of counsel on the brief were Timothy E. DeMasi, of New York, New York; and Jack B. Blumenfeld and Karen Jacobs Louden, Morris, Nichols, Arsh & Tunnell, of Wilmington, Delaware.

George F. Pappas, Venable LLP, of Washington, DC, argued for counterclaim defendant-appellee. With him on the brief were Vicki Margolis and Rebecca G. Lombard.

Ruffin B. Cordell, Fish & Richardson P.C., of Washington, DC, argued for defendant/counterclaimant-appellant. With him on the brief were Lauren A. Degnan and Tina M. Chappell. Of counsel on the brief were Mark J. Hebert and Thomas M. Johnston, of Boston, Massachusetts. Of counsel was William J. Marsden, Jr., of Wilmington, Delaware.

Appealed from: United States District Court for the District of Delaware

Chief Judge Sue L. Robinson

United States Court of Appeals for the Federal Circuit

04-1323, -1487

ARTHROCARE CORPORATION

Plaintiff/Counterclaim Defendant-
Appellee,

and

ETHICON, INC.,

Counterclaim Defendant-Appellee,

v.

SMITH & NEPHEW, INC.,

Defendant/Counterclaimant-Appellant.

DECIDED: May 10, 2005

Before MAYER, LOURIE, and BRYSON, Circuit Judges.

BRYSON, Circuit Judge.

The term electrosurgery refers to a surgical technique in which high frequency electrical current is applied to cut or ablate body tissue. There are two forms of electrosurgical devices, monopolar and bipolar. In monopolar devices, electric current passes from a single exposed electrode into the body tissue that is to be ablated. The current then passes through the body to a return electrode, usually attached to the outside of the patient's body. In bipolar devices, both electrodes are inserted into the

body. The current passes from one electrode, through the targeted body tissue, and then back to the return electrode.

Electrosurgery has the benefit of reducing patient bleeding and trauma. However, there are disadvantages to applying high voltages within the patient's body, including the risk that the electrical discharge will cause damage other than to the target tissue. For that reason, the path of the electrical current through the body needs to be carefully controlled. Moreover, surgeons prefer to cleanse the surgical area during arthroscopic procedures with fluids that conduct electricity, such as saline. Therefore, electrosurgical devices need to be usable in such fluids. The patents at issue in this case sought to address the problems of controlling the electrical path and enabling electrosurgical instruments to function in the presence of conductive fluids.

The three patents at issue, U.S. Patent Nos. 5,697,536 ("the '536 patent"), 5,697,882 ("the '882 patent"), and 6,224,592 ("the '592 patent"), are owned by ArthroCare Corporation. ArthroCare sued Smith & Nephew, Inc., in the United States District Court for the District of Delaware claiming that Smith & Nephew was liable for infringement of those patents based on its manufacture of certain electrosurgical probes and the use of those probes in surgery. In response, Smith & Nephew filed a counterclaim alleging that ArthroCare and Ethicon, Inc., had violated the antitrust laws by entering into a conspiracy in restraint of trade. Smith & Nephew's theory of antitrust liability was that ArthroCare and Ethicon had settled an earlier dispute in a manner designed to restrain other competitors from entering the market for electrosurgical devices and that ArthroCare had brought this action, although knowing it to be

objectively baseless, as part of an unlawful conspiracy with Ethicon to interfere with Smith & Nephew's business.

Before trial, the district court bifurcated the case. The first phase encompassed the patent issues of infringement, invalidity, and inequitable conduct. The second phase addressed damages, willfulness, and the antitrust counterclaim. The court stayed the second phase until after completion of the trial on the first.

At the conclusion of the patent trial, the jury determined that Smith & Nephew had directly or indirectly infringed the three patents and that none of the patents were invalid. Smith & Nephew then moved for judgment as a matter of law and a new trial. ArthroCare meanwhile moved to dismiss Smith & Nephew's antitrust counterclaim for failure to state a claim upon which relief could be granted. Before Smith & Nephew's response to that motion was due, the district judge stayed all proceedings on the antitrust counterclaim while she considered Smith & Nephew's motions for judgment as a matter of law and a new trial. The court eventually denied Smith & Nephew's motions and entered a permanent injunction against Smith & Nephew. ArthroCare Corp. v. Smith & Nephew, Inc., 310 F. Supp. 2d 638, 681 (D. Del. 2004). On the same day, the court granted ArthroCare's motion to dismiss the antitrust counterclaim before Smith & Nephew responded to the motion. Smith & Nephew sought reconsideration of the dismissal order, but the court denied the motion for reconsideration. ArthroCare Corp. v. Smith & Nephew, Inc., 315 F. Supp. 2d 615, 618 (D. Del. 2004). In denying reconsideration, the court stated that the order staying proceedings on the antitrust counterclaim had stayed only discovery and trial of the counterclaim and did not affect the motion to dismiss. The court further stated that Smith & Nephew's reliance on a

statement by the court in a June 2003 telephone conference was misplaced, and that if Smith & Nephew "believed that ArthroCare's motion [to dismiss] was premature and inconsistent with" the court's stay order, it should have indicated so, presumably in a more formal manner. Id. at 318 n.3. The court added that it was "not persuaded that any argument from Smith & Nephew about the basis for its antitrust allegations will change the court's decision." Id. at 319.

|

On appeal, Smith & Nephew first argues that the district court erred in dismissing the antitrust counterclaim without giving it an opportunity to respond to the motion to dismiss or to amend its counterclaim. Following the trial on the patent issues, the district court continued the stay of the antitrust proceedings pending the disposition of Smith & Nephew's motions for judgment as a matter of law and a new trial, and ArthroCare's request for an injunction. After the court ruled on those matters, however, the court dismissed the antitrust counterclaim even though it had not received a response to the motion to dismiss from Smith & Nephew. The court noted that Smith & Nephew had not filed a response to the motion and from its silence "presume[d] that Smith & Nephew does not oppose the motion." Moreover, the court concluded that the "sham litigation" aspect of Smith & Nephew's antitrust counterclaim was baseless. The court did not address the other ground for the antitrust counterclaim, namely, the allegation that ArthroCare and Ethicon had entered into a settlement of their dispute that was designed to exclude other competitors, including Smith & Nephew, from the relevant market.

Smith & Nephew contends that, because of the stay of proceedings on the antitrust counterclaim, it never had an opportunity to respond to the motion to dismiss. In the absence of an opportunity to respond, Smith & Nephew contends that it was error for the court to grant the motion to dismiss.

In its opinion on reconsideration, the district court characterized the pretrial order staying proceedings on the antitrust counterclaim as staying discovery and trial but not the motion to dismiss. While it is true that the written stay order referred only to discovery and trial, the court elaborated on that order in a June 9, 2003, telephone conference, in which the court stated that proceedings on the pending motion to dismiss the antitrust counterclaim were stayed. In response to a question about the pending motion to dismiss, the court stated that "everything is stayed and we'll deal with the antitrust issues later. . . . So the pending motion [to dismiss] on antitrust is stayed and everything having to do with the antitrust counterclaims, discovery, substantive motions, et cetera, is stayed pending further order of the court." In light of that colloquy, it was reasonable for Smith & Nephew to conclude that the stay order extended to the proceedings on the motion to dismiss and that it would not be required to respond to the dismissal motion until the stay was lifted. Thus, the effect of this sequence of events was that the court granted ArthroCare's motion to dismiss the antitrust counterclaim without giving Smith & Nephew an opportunity to respond to the motion.

The Supreme Court has stated that under Rule 12(b)(6) of the Federal Rules of Civil Procedure, "a plaintiff with an arguable claim is ordinarily accorded notice of a pending motion to dismiss for failure to state a claim and an opportunity to amend the complaint before the motion is ruled upon." Neitzke v. Williams, 490 U.S. 319, 329

(1989). The purpose of such a procedure is to enable the plaintiff "meaningfully to respond by opposing the motion to dismiss on legal grounds or by clarifying his factual allegations so as to conform with the requirements of a valid legal cause of action." Id. at 329-30. Providing the plaintiff with an opportunity to respond "crystallizes the pertinent issues and facilitates appellate review of a trial court dismissal by creating a more complete record of the case." Id. at 330.

The Third Circuit, whose law applies to this procedural issue, has extended that principle by adopting a categorical rule that "a Rule 12(b)(6) motion for dismissal . . . may be disposed of only after a hearing, which affords an opportunity to present legal arguments either orally, in writing, or both at the District Court's discretion." Dougherty v. Harper's Magazine Co., 537 F.2d 758, 761 (3d Cir. 1976); see also Oatess v. Sobolevitch, 914 F.2d 428, 430 n.5 (3d Cir. 1990) (a district court may not dismiss a complaint under Rule 12(b)(6) sua sponte without giving the plaintiff a chance to respond). In this case, Smith & Nephew did not have an opportunity to respond to the motion to dismiss, in contravention of that rule.

ArthroCare and Ethicon claim that Smith & Nephew was given the opportunity to contest the motion to dismiss in the form of its motion for reconsideration, which the district court denied. That argument is flawed for several reasons. In Dougherty, the plaintiff also petitioned the district court for reconsideration, yet the Third Circuit reversed the district court for dismissing the case without giving the plaintiff an opportunity to respond. 537 F.2d at 761; see also Jordan v. County of Montgomery, Pa., 404 F.2d 747, 748 (3d Cir. 1969) (finding that "the district court erred in dismissing [the plaintiff's] complaint on the defendants' motions without affording him an

opportunity to submit a written statement in opposition to the motions" even though the plaintiff made a motion for relief from judgment under Rule 60(b)(1)). Additionally, when it denied Smith & Nephew's motion for reconsideration, the district court did not conduct a de novo analysis of the motion to dismiss, but instead applied the highly restrictive standard applicable to reconsideration motions. See ArthroCare, 315 F. Supp. 2d at 618. The reconsideration process thus did not satisfy the requirement that Smith & Nephew be given the opportunity "meaningfully to respond" to the motion to dismiss.

On the merits, ArthroCare and Ethicon argue that Smith & Nephew's counterclaim should fail because the claim does not describe the antitrust injury sufficiently and does not provide enough specificity in describing the antitrust violation. Third Circuit precedent indicates, however, that if a claim fails for lack of specificity, the district court should grant leave to amend the complaint, regardless of whether the complainant asks for it. Shane v. Fauver, 213 F.3d 113, 116 (3d Cir. 2000); Borelli v. City of Reading, 532 F.2d 950, 951 n.1 (3d Cir. 1976). The court should dismiss only if the complainant is unable or unwilling to amend the complaint. Dist. Counsel 47 v. Bradley, 795 F.2d 310, 316 (3d Cir. 1986). We therefore vacate the district court's dismissal of the antitrust counterclaim and direct the court to allow Smith & Nephew to respond to the motion to dismiss. If the court concludes, as urged by ArthroCare and Ethicon, that Smith & Nephew's antitrust counterclaim fails for lack of specificity, Smith & Nephew should be given the opportunity to amend.

Because we dispose of the counterclaim issue on a procedural ground, we take no position on the merits of the counterclaim. However, we note that the district court did not intend to issue a permanent injunction until after it disposed of the antitrust

counterclaim. Because the district court must reconsider that counterclaim on remand, the permanent injunction against Smith & Nephew must be vacated pending the disposition of the antitrust counterclaim. See Tegal Corp. v. Tokyo Electron Am., Inc., 257 F.3d 1331, 1351 (Fed. Cir. 2001).

II

Smith & Nephew next appeals the denial of its motion for judgment as a matter of law that the asserted claims of the '536 patent (claims 46, 47, and 56) were anticipated by a prior art patent, U.S. Patent No. 4,116,198 ("the Roos patent" or "the '198 patent"), and an article by the inventor of that patent, Eberhard Roos and a co-author, E. Elsässer.

As an initial matter, ArthroCare argues that Smith & Nephew is precluded from arguing invalidity on appeal. ArthroCare maintains that Smith & Nephew did not specify the basis on which it sought judgment as a matter of law after presenting its evidence at trial, as required by Rule 50 of the Federal Rules of Civil Procedure. Because of that failure, ArthroCare claims that Smith & Nephew may not assert invalidity now. That argument has no merit, however, because the district judge acknowledged that she precluded argument on the motions for judgment as a matter of law at trial and indicated that Smith & Nephew's rights were preserved.

On the merits, the '536 patent is directed to an electrosurgical system. The three asserted claims of the '536 patent all recite an electrosurgical probe "comprising a shaft having a proximal end and a distal end, an electrode terminal disposed near the distal end, and a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power supply." The claims also recite "an

electrically conducting fluid supply for directing electrically conducting fluid to the target site such that the electrically conducting fluid generates a current flow path between the return electrode and the electrode terminal.” ArthroCare maintains that neither the Roos patent nor the Roos and Elsässer article teaches either an electrically conducting fluid or an electrosurgical probe with a connector at the proximal end connecting the probe to the power supply. We disagree and hold that the evidence at trial clearly established that the prior art references disclose both of those features.

A

With respect to the “electrically conductive fluid” limitation, claim 1 of the Roos patent recites that the claimed electrode is “adapted to be filled with liquid to provide electrical conductance.” ’198 patent, col. 7, ll. 60-62. ArthroCare posits that there is a legally tenable distinction between a fluid that provides electrical conductance and “an electrically conducting fluid.” In particular, ArthroCare argues that while all materials provide some electrical conductance, most do not possess a sufficiently high level of conductivity for a person of skill in the art to consider them “electrically conductive.”

ArthroCare’s distinction is belied by the description of “electrically conducting fluid” in the ’536 patent and by the prosecution history of the Roos patent, which together make clear that both patents recite a fluid that provides a path for the electrical current between the electrodes of the electrosurgical devices. The ’536 patent explains that the conducting fluid provides a “current flow path between the target site and the return electrode.” ’536 patent, col. 3, ll. 27-30; id., col. 7, ll. 35-46. The inventor of the ’536 patent affirmed that he used the term “conducting fluid” in the ’536 patent to indicate that the fluid “provides the pathway between the active electrode or electrodes,

plural, and the return electrode.” Furthermore, the description of the fluid in the patent indicates that the conducting fluid facilitates the passage of current by providing a low electrical impedance current path between the two electrodes. Id., col. 7, ll. 40-43.

The prosecution history of the Roos patent makes clear that the fluid “provid[ing] electrical conductance” recited in claim 1 of the Roos patent reads on the “electrically conducting fluid” of the ’536 patent. The Roos patent prosecution history notes that the washing fluid recited in claim 1 of the Roos patent must “provide the necessary electrical conductor” between the electrodes and that “there is always a well-defined current path . . . through the washing (and tissue) fluid.” Thus, the Roos patent describes a fluid that creates a “current flow path.” That description of the fluid makes sense given the language of claim 1 of the Roos patent, which recites that the liquid “provides electrical conductance between said electrodes.” That language means that the fluid is introduced during electrosurgery to provide conductance and to help generate a “current flow path.” While it is true that, given enough voltage, an electrical current can be made to flow through any substance, it would be bizarre to say that a non-conductor was introduced to “provide electrical conductance.” Consequently, we conclude that the Roos patent discloses an electrically conducting fluid.

The district court provided three reasons for concluding that the Roos patent does not teach an electrically conducting fluid. First, the court reasoned that the Roos patent does not disclose such a fluid because it does not list either saline or Ringer’s lactate as an example of an electrically conducting fluid. That rationale is unconvincing, however, because there is no requirement that an anticipating reference must provide specific examples; rather, the reference need only “be enabling and describe the

applicant's claimed invention sufficiently to have placed it in possession of a person of ordinary skill in the field of the invention." In re Paulsen, 30 F.3d 1475, 1479 (Fed. Cir. 1994). Second, the district court focused on the fact that the Roos patent specification does not distinguish between the fluid used in monopolar devices and the fluid used in bipolar devices. The court reasoned that because most monopolar devices use nonconducting fluid, the Roos patent does not clearly teach conducting fluid. That inference, however, is contradicted by the claim language and prosecution history of the Roos patent reviewed above. Finally, the court looked to an embodiment described in the Roos patent in which the probe touches the tissue. The court concluded that there would be no need for electrical contact with the patient's tissue if the fluid were conducting. The court's analysis, however, focused on only one embodiment in the Roos patent. There are other embodiments in the patent as to which it is clear that no such direct contact is necessary, see, e.g., '198 patent, col. 3, ll. 9-15, and it was error for the district court to limit the disclosure of the prior art reference to a preferred embodiment. See Ultradent Prods., Inc. v. Life-Like Cosmetics, Inc., 127 F.3d 1065, 1068 (Fed. Cir. 1997). ArthroCare makes a similar point, contending that another embodiment described in the Roos patent uses non-conducting fluid. In support of its argument, ArthroCare points to a later patent by Roos, which describes the foreign patent to which the Roos patent claimed priority. Like the district court's analysis, however, ArthroCare's argument fails because it addresses only a single embodiment in the Roos patent.

The Roos and Elsässer article also teaches an electrically conducting fluid. The article describes how problems with prior art monopolar devices can be eliminated by

providing "the high-frequency current a path . . . offering such low resistance that aberrant currents or leakage currents do not even occur." The article describes a way of accomplishing that goal by placing a neutral electrode close to the active electrode in an irrigation liquid so that current flows through the liquid. The article states that creating such a current path with the irrigation liquid creates "very good electrical conditions." Furthermore, the diagrams in the Roos and Elsässer article depict current "directly flowing" along a path through the fluid. The description of the role of the irrigation liquid is quite similar to the description of the role of the conducting fluid in the '536 patent, which is to provide a "current flow path between the target site and the return electrode." '536 patent, col. 3, ll. 27-30.

ArthroCare maintains that the article does not teach an electrically conducting fluid because the article uses the term "irrigation liquid" in describing the liquid used in both the bipolar and the monopolar procedures. As we have noted, most monopolar procedures use nonconducting fluids. Because the article does not use different names for the liquids used in the two procedures, ArthroCare contends that there is no way of knowing if the irrigation liquid is a conducting fluid. ArthroCare's argument fails, however, because the article pays little attention to the nature of the irrigation liquid used in the monopolar prior art. It is unclear whether the liquid in the monopolar procedure is nonconductive or whether it is even the same liquid that is used in the bipolar case. What is clear is that, in describing bipolar devices, the Roos and Elsässer article describes the liquid as providing a path for the current, thus serving as a conducting fluid. Even giving ArthroCare the benefit of all reasonable inferences, the

fact that the article uses the same term to refer to the fluid in both procedures does not justify an inference that the fluid described in the bipolar procedure is nonconductive.

B

ArthroCare also maintains that the Roos patent and the Roos and Elsässer article do not disclose “a connector near the proximal end of the shaft for electrically coupling the electrode terminal to the electrosurgical power supply.” Both the patent and the article clearly show that the electrodes are coupled to a power source. See, e.g., ’198 patent, col. 5, ll. 30-35. Hence, in arguing that the prior art does not anticipate, ArthroCare focuses on the term “connector near the proximal end.” However, both the Roos patent and the article disclose such a connector.

The Roos patent states that the claimed invention relates to an electrosurgical device with electrodes and “an insulated cable which can be passed through an endoscope, to which can be connected the pole of a high frequency generator.” ’198 patent, col. 1, ll. 5-15; see also id., col. 7, ll. 50-51. The district court construed the term “connector” to mean “a structure that electrically links the electrode terminal to the high frequency power supply.” The insulated cable in the Roos patent does exactly that. Specifically, Figure 4 of the Roos patent provides a schematic diagram for the electrosurgical probes in the patent, and it illustrates that the electrodes are connected via “output lines” to a high frequency generator. See id., col. 5, ll. 8-9; id., col. 5, ll. 35-36.

On appeal, ArthroCare appears to accept the district court’s construction of the term “connector,” but it asserts that the jury could have rejected the contention that a wire is a connector for the purposes of the ’536 patent. ArthroCare raises various

arguments concerning whether a wire is a connector, but those arguments miss the point. The district court stated that a connector is a "structure" that electrically links the electrodes and the power supply. That construction of the term "connector" easily encompasses a wire between the electrodes and the power supply. Because ArthroCare does not dispute the district court's construction, ArthroCare's attempt to distinguish "wires" from "connectors" fails. The Roos patent clearly depicts a connector under the district court's construction.

Furthermore, the Roos patent indicates that the electrical wires that connect the electrodes to the power source pass through the probe. The specification of the Roos patent describes one embodiment as having the two electrical leads to the electrodes "pass outwards from the cylindrical neutral electrode 11, which at 20 are combined to form a single cable, leading to the rear end of the endoscope 13." '198 patent, col. 7, ll. 3-5. In other words, the electrical leads attach to the power source from near the proximal end of the endoscope. While Smith & Nephew's expert agreed that the Roos patent does not explicitly identify the point at which the wires exit the probe, he stated that a person of skill in the art would understand that the wires would be attached to the power source after exiting the back end of the probe. See Helifix Ltd. v. Blok-Lok, Ltd., 208 F.3d 1339, 1347 (Fed. Cir. 2000) (even if a piece of prior art does not expressly disclose a limitation, it anticipates if a person of ordinary skill in the art would understand the prior art to disclose the limitation and could combine the prior art description with his own knowledge to make the claimed invention).

A "connector near the proximal end" of the electrosurgical probe is also found in the Roos and Elsässer article. In Figure 8 of the article, the electrosurgical probe is

drawn in cross-section. The figure shows the active and neutral probes attached to wires, and the labels state that those wires go to the power supply. Therefore, a connector is disclosed in the Roos and Elsässer article as well. Moreover, Figure 10 of the article illustrates how those wires leave the probe. That figure is a schematic diagram, which depicts the cutting and neutral electrodes inside the body and projecting from the “resectoscope shaft” on one end. The wires also project from the other end of the shaft, where they connect to a high frequency power source. Thus, the connectors are shown exiting near the proximal end of the probe. The article even provides a photograph of the instrument depicted in Figure 10. The photograph verifies that the electrical leads leave the probe at its back end. In contending that the article does not disclose a connector near the proximal end of the probe, ArthroCare limits its argument to contesting the veracity of Smith & Nephew’s expert and disputing his conclusions regarding the presence of the electrical connector in the article. However, the article speaks for itself, and it clearly discloses such a connector.

In sum, Smith & Nephew has proved by clear and convincing evidence that the asserted claims of the ’536 patent were anticipated either by the Roos patent or the Roos and Elsässer article. Because the jury’s determination that the ’536 patent was not invalid is not supported by substantial evidence, we reverse the district court’s denial of Smith & Nephew’s motion for judgment as a matter of law on that issue.

III

Smith & Nephew also appeals the denial of its motion for judgment as a matter of law that the ’882 patent is invalid because the claims of that patent were impermissibly broadened by a certificate of correction. In particular, Smith & Nephew argues that

claim 1 of the '882 patent required three electrodes when it was originally issued, but that after the correction the claim required only two electrodes. Smith & Nephew contends that the change impermissibly broadened the patent's scope.

When ArthroCare originally filed the application that matured into the '882 patent, the claims recited only an "active electrode" and a "return electrode." Before any examination on the merits, ArthroCare changed the claims by making what it termed "a few minor amendments." Those amendments changed the term "active electrode" to "electrode terminal" in three places in claim 1 of the application, but did not make the change in a fourth place, where the term "active electrode" was left unchanged. The prosecuting attorney noted the error on the same day that the patent issued and immediately asked the Patent and Trademark Office to change the remaining reference from "active electrode" to "electrode terminal." The prosecuting attorney testified at trial that the change listed in the certificate of correction was made solely due to a typographical error. Smith & Nephew did not attempt to rebut that evidence.

The correction of a ministerial error in the claims, which also serves to broaden the claims, is allowable if it is "clearly evident from the specifications, drawings, and prosecution history how the error should appropriately be corrected" to one of skill in the art. Superior Fireplace Co. v. Majestic Prods. Co., 270 F.3d 1358, 1373 (Fed. Cir. 2001). At trial, Smith & Nephew sought to show that the requisite standard was not met in the case of the correction to the '882 patent. Smith & Nephew's proof on that issue failed to satisfy the jury, and we hold that substantial evidence supports the verdict.

In the first place, claim 1 of the '882 patent does not make sense if it is interpreted to contain three types of electrodes instead of two. The claim requires that

an electrode terminal and a return electrode be coupled to a high voltage source. The claim as originally issued then required that an “active electrode” be placed in close proximity to the target site. High frequency voltage is then applied between the electrode terminal and the return electrode, which induces the discharge of energy to the target site. Nothing in the patent suggests any reason to place a third type of electrode close to the target site. The whole point of the patent is to use the electrode terminal and return electrode to apply a voltage across the tissue; a third type of electrode would serve no apparent purpose. Moreover, the specification refers to “electrode terminal” and “active electrode” interchangeably. See ’882 patent, col. 20, II. 19-21; id., col. 20, II. 53-54. That evidence indicates that it was clear how the typographical error in the original claims should have been corrected.

The prosecution history further supports ArthroCare’s argument that it was unambiguous how the remaining reference to an active electrode in claim 1 should be changed. From the beginning, the claims referred to only two electrodes. The change of the term “active electrode” to “electrode terminal” was made before any examination on the merits, and the uncontested evidence establishes that it was meant to be a global renaming. In fact, most of the references to “active electrode” in the claims were changed. Finally, ArthroCare presented unrefuted testimony from an expert who stated that he understood the term “active electrode” in the uncorrected claim to refer to the “electrode terminal.”

Smith & Nephew’s only evidence that it remained unclear how to fix the error in claim 1 is that claim 53, which depends on claim 1, also refers to “the active electrode.” According to Smith & Nephew, that evidence implies that it cannot be apparent how to

fix the remaining instance of “active electrode” in claim 1, because changing it to “electrode terminal” would leave claim 53 without an antecedent basis. In fact, however, a simple explanation for the use of the term “active electrode” in claim 53 is that the prosecuting attorney made another error in claim 53 of the same type that was corrected in claim 1. The prosecuting attorney’s failure to replace the term “active electrode” twice in the claims, instead of once, does not demonstrate by clear and convincing evidence that a person of ordinary skill in the art would not understand how to correct those errors. Accordingly, substantial evidence supports the jury’s conclusion that the certificate of correction was valid. We therefore affirm the district court’s denial of judgment as a matter of law of invalidity of the ’882 patent.

IV

Finally, Smith & Nephew appeals the denial of its motion for judgment as a matter of law that it was not liable for indirect infringement of the ’592 patent. The ’592 patent pertains to a method for conducting electrosurgery. The method comprises positioning an electrode terminal near the target site in the presence of an electrically conductive fluid. Next, a return electrode is positioned in the fluid, while ensuring “that the return electrode is not in contact with the body structure.” ’592 patent, col. 24, ll. 13-14. Finally, high frequency voltage is applied between the electrode terminal and the return terminal so as to force current to flow into the target site. Smith & Nephew argues that it is not liable for contributory infringement or inducement of infringement of the ’592 patent, because there was no evidence that its probes were ever used in a manner that directly infringed the patented method. Smith & Nephew maintains that none of the videotaped surgical procedures using its probes infringed the patented

method because in every case the return electrode was shown touching "the body structure." Smith & Nephew asserts that the jury erred in finding infringement because ArthroCare convinced the jury to disregard the district court's claim construction.

In construing the claims of the '592 patent, the district court instructed the jury that the return electrode "is not to contact the body at all during the performance of the claimed method." The court noted, however, that "[t]he claimed method does not contain any time limitations. Thus, the claimed method is performed when each of the three steps of the claim has been completed." Smith & Nephew does not challenge that claim construction.

Based upon the district court's claim construction, the jury was free to find infringement if it concluded that the return electrode did not touch the body when each step of the patented method was being performed. There was no need for the electrode to be kept apart from the body throughout the entire surgical procedure; nothing in the claim language or in the court's claim construction required that the electrode not touch the body at any time between the performance of the steps of the claimed process. That is in effect what the district court advised the jury when it instructed that the claimed method does not contain time limitations and that the claimed method is performed when each of the three steps is completed.

Smith & Nephew interprets the court's claim construction to require that the return electrode never touch the body until all the claimed steps are completed. That interpretation, however, is not faithful to the claim construction that the trial court adopted, and it is not a convincing interpretation of the claim language. When the district court construed the claim language at issue here, it rejected Smith & Nephew's

proposed construction, which was that the return electrode must never touch the body at any time during the surgery. The court properly rejected that proffered claim construction on the ground that it imposed an unclaimed temporal requirement on the method. In effect, Smith & Nephew is now advancing that rejected claim construction, while maintaining that it has accepted the district court's construction. We uphold the district court's claim construction and reject Smith & Nephew's argument that the court's construction was actually a version of the very construction that the court rejected before trial.

Substantial evidence at trial showed that Smith & Nephew's probes were used so that the return electrode did not touch the body at a time when all the other claim limitations were met. ArthroCare's expert stated that during surgery "the return electrode is positioned back . . . so that you try to make sure that it's not in contact" with the body. Even Smith & Nephew's expert admitted that there were instances in which the return electrode was not in contact with the body during certain steps of the claimed method. Additionally, upon viewing the videotaped electrosurgeries, project managers for two of Smith & Nephew's accused probes admitted that the return electrodes were not in contact with body tissue during use.

There was also strong circumstantial evidence that Smith & Nephew's probes were used in an infringing manner, and that Smith & Nephew induced users to employ the probes in that way. Smith & Nephew's witnesses confirmed that the return electrodes of the accused probes were not designed or intended to contact the body tissue when power was being applied to the device. That evidence was supported by testimony from ArthroCare's expert. Moreover, the sales literature accompanying one

of the accused devices instructs surgeons that "care should be taken to prevent tissue contact with the return electrode." That literature explains why the surgeon should avoid touching the return electrode to the body tissue. Even though the return electrode on the accused probe is enlarged so as to lower the return current density and thus reduce the risk of burns, the return electrode of the Smith & Nephew device was still not supposed to touch the body during the application of power because "[w]hile it will not be as hot as the active electrode at the distal tip, the return electrode may become heated. For this reason, it is important to avoid inadvertent contact with the tissue." Instruction manuals for the other accused probes similarly confirm that the return electrode should be completely surrounded by or immersed in saline during use. Thus, substantial evidence supports the jury's determination that Smith & Nephew indirectly infringed the claimed method. We therefore affirm the district court's denial of judgment as a matter of law with respect to the '592 patent.

Each party shall bear its own costs for this appeal.

AFFIRMED IN PART, REVERSED IN PART, VACATED IN PART, and REMANDED.